

S E C R E T

## D/F OPERATORS LOG

TUESDAY 28 JUNE 1960

BNG Nr.	TIME EDST	STN.	FREQ MC/S	BEARING	REMARKS
					Departed Andrews AFB approx 1000 EDST aboard AF C-47 48137.
1	1015	WWV	5.0	110/290	R390/URR receiver. I.F. output feeding ARN-7 low frequency D/F receiver antenna terminals. External loop feeding R390/URR. Bearing indicator slaved to Aircraft compass. (AVC control "ON".)
2.	1017	WWV	5.0	112/292	AVC "OFF" NW.
3.	1018	WWV	5.0	115/295	
4.	1023	WWV	5.0	090/270	
5.	1028	WWV	5.0	080/260	
6.	1032:30	WWV	5.0	085/265	SIG WEAKER. VY HIGH (AUDIO) NOISE LVL.
	1035	WWV	10.0		QSY THIS FREQ. GUD SIG. AVC "ON".
	1036				SIG. OK IN MONITOR FONES. NIL HRD IN D/F PAIR. CHECKING. OPEN LEAD FOUND.
	1045	WCC	8.585		QSY THIS STN FOR ON/OFF CW KEYING PLUS DISTANCE. VY STRONG SIGNAL.
7.	1051	WCC	8.585	258/078	GOOD NULL
.	1052:30	WCC	8.585	000/180	WILD BNG.
8.	1101:45	WCC	8.585	020/200	GOOD NULL
9.	1110:30	WCC	8.585	100/280	FAIR NULL. OVER OCEAN CITY MD. ACFT SWINGING.
10.	1113:30	WCC	8.585	110/290	POOR NULL. DIFFICULT TO HEAR D/F OPR IN HI AMBIENT NOISE.
	1115	WWV	10.0		QSY THIS STN AGN.
11.	1116	WWV	10.0	130/310	FAIR NULL
12.	1132	WWV	10.0	135/315	OVER DOVER, DEL. FAIR NULL
13.	1135	WWV	10.0	090/270	GOOD NULL
14.	1140	WWV	10.0	120/300	GOOD NULL
	1213	WWV	5.0		QSY THIS FREQ AGN.
15.	1216	WWV	5.0	090/270	POOR NULL
	1220				secured circuit.

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Geographical coordinates from which bearings 1 through 16 were plotted.

BNG NR	TO	LONG.	LAT.	FROM	LONG.	LAT.	TIME
		°   '   "	°   '   "		°   '   "	°   '   "	
1	WWV	076 50 00 W	038 59 00 N	AF/C47 48137	076 27 00W	038 51 30N	1015
2	WWV	" " "	" " "	"	076 22 00W	038 52 00N	1017
3	WWV	" " "	" " "	"	076 18 00W	038 52 15N	1018
4	WWV	" " "	" " "	"	076 04 30W	038 54 15N	1023
5.	WWV	" " "	" " "	"	075 51 00W	039 00 00N	1028
6	WWV	" " "	" " "	"	075 40 00W	039 04 00N	1032.5
7	WCC	070 02 00 W	041 40 00 N	"	075 29 30W	038 36 30N	1051
8	WCC	" " "	" " "	"	075 30 00W	038 22 00N	1101:45
9	WCC	" " "	" " "	"	075 05 00W	038 20 00N	1110:30
10	WCC	" " "	" " "	"	075 11 15W	038 23 00N	1113:15
11	WWV	076 50 00 W	038 59 00 N	"	075 17 30W	038 27 00N	1116
12.	WWV	" " "	" " "	"	075 28 00W	039 05 00N	1132
13	WWV	" " "	" " "	"	075 32 30W	039 09 00N	1135
14	WWV	" " "	" " "	"	075 49 00W	039 05 30N	1140
15	WWV	" " "	" " "	"	076 29 00W	039 05 30N	1215:30
16	WWV	" " "	" " "	"	076 32 00W	039 02 00N	1216

NOTE: Aircraft positions plotted by navigator on USAF Operational Navigation Chart. Positions obtained by visual observation of the terrain. Chart Nr. ONC 357. WWV and WCC coordinates obtained from ITU Radio Frequency Usage book.

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TIME EST	STN.	FREQ MC/S	DIST. IN NAUT. MI.	OBSV'D BNG	CORRECTED BNG	TRUE BNG	ERROR	BNG NR.
1015	WWV	5.0	18.5	290° 00' 00"	282° 30' 00"	285° 00' 00"	- 02° 30' 00"	1.
1017	WWV	5.0	23.0	292 00 00	284 30 00	288 51 30	- 04 21 30	2.
1018	WWV	5.0	26.0	295 00 00	287 30 00	286 25 30	+ 01 05 30	3.
1023	WWV	5.0	35.5	270 00 00	262 20 00	274 56 00	- 12 56 00	4.
1028	WWV	5.0	46.0	260 00 00	252 00 00	274 26 00	- 22 26 30	5.
1032.5	WWV	5.0	54.0	265 00 00	256 45 00	273 15 00	- 16 30 00	6.
1051	WCC	8.585	310.5	078 00 00	070 00 00	051 59 00	+ 10 01 00	7.
1101	WCC	8.585	320.0	020 00 00	012 00 00	049 58 00	- 37 58 00	8.
1110.5	WCC	8.585	306.0	100 00 00	091 30 00	047 42 30	+ 043 22 30	9.
1113.15	WCC	8.585	308.0	110 00 00	101 30 00	048 35 30	+ 052 54 30	10.
1116	WWV	10.0	78.5	310 00 00	301 45 00	293 59 00	+ 007 46 00	11.
1132	WWV	10.0	64.5	315 00 00	306 30 00	261 11 30	+ 045 18 30	12.
1135	WWV	10.0	61.5	270 00 00	261 30 00	259 35 30	+ 001 54 30	13.
1140	WWV	10.0	57.0	300 00 00	292 00 00	262 13 00	+ 029 43 00	14.
1212.5	WWV	10.0	18.0	240 00 00	232 40 00	245 04 30	- 012 24 30	15.
1216	WWV	5.0	14.5	270 00 00	262 40 00	254 47 30	+ 007 52 30	16.

NOTE: The observed bearings were obtained from the experimental equipment installed on a USAF C-47, registered number 48137. The corrected bearings resulted from the standard magnetic variation as shown on USAF Operational Navigation Chart, ONC 357. True bearings and the distance from the aircraft to the target transmitter were computed from Agetons "Dead Reckoning Altitude and Azimuth Table", Third Edition. USN Dept. Hydrographic Office, H.O. No. 211, using as an additional aid, FCC Form FE-85, devised for use with H.O. 211, expressly for direction finding purposes.

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